### PERMIT TO OPERATE

Number P-2501-A-1

### EQUIPMENT OWNER-OPERATOR:

Pacific Gas and Electric Company P.O. Box 1617 Morro Bay, California 93443-1617

# EQUIPMENT LOCATION:

Morro Bay Power Plant 1209 Embarcadero Road Morro Bay, California 93442

FOR THE EQUIPMENT LISTED HEREIN AND SUBJECT TO THE LISTED CONDITIONS

Issued: February 9, 1998, Effective: March 31, 1998

March 31, 2003

ISSUANCE DATE ANNIVERSARY

ROBERT W. CARR Air Pollution Control Officer

Application Numbers 2055 and 2103

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### Conventions and Abbreviations

- A. The following referencing conventions are used in this permit:
- 1. The reference for each requirement will be noted in [square brackets]. References

which are noted as being "District-only" are not federally-enforceable requirements. All

conditions with references in [square brackets] that do not contain the phrase

"District-only" must be considered federally-enforceable requirements.

2. Wherever possible, each requirement, condition, or piece of equipment has been

identified with a unique permit section/condition number. e.g., the 150  $\ensuremath{\mathsf{ppmv}}$  NOx limit

for boilers 1 & 2 is condition I.A.1 and the 56 ppmv NOx limit for boilers 3 & 4 is

I.A.3.

followed by the rule number. Requirements based on District rules approved into the

State Implementation Plan (SIP) will be noted by the phrase "SIP Rule" followed by the  $\,$ 

rule number as it appears in the SIP.

4. Concerning citations for the basis of conditions. If the SIP version of a rule is the same  ${}^{\circ}$ 

as the current version of a rule, only the SIP version will be cited because including

both would be considered redundant. If the SIP version of a rule is different than the

current version, both will be included.

5. If there is no over-riding need to have the current version of a permit condition be

considered federally-enforceable, it will be listed as "District-only". An example of an

over-riding need where the current rule would be considered federally-enforceable

 $% \left( 1\right) =\left( 1\right) +\left( 1\right) +\left($ 

 $\ensuremath{\text{6.}}$  Notations at the beginning or end of a multi-part requirement shall apply to the entire

requirement unless specific parts are otherwise referenced.

7. Federal regulation subpart references will typically be indicated by their subpart

designation only. References to regulation appendices will be as follows:

 $40 {\rm CFR60.App}$  F.4.1 will be used for section 4.1 of Appendix F to 40 CFR60. The title

of all subparts included here are as follows:

```
40CFR60, Standards of Performance for New Stationary Sources (NSPS)
      40CFR60 Appendix F, Quality Assurance Procedures
      40CFR61, National Emission Standards for Hazardous Air Pollutants
(NESHAPS)
      40CFR61 Subpart M, National Emission Standards for Asbestos
      40CFR72, Permits Regulation (Acid Rain Program)
      40CFR73, Sulfur Dioxide Allowance System
      40CFR75, Continuous Emission Monitoring
      40CFR75 Subpart D, Missing Data Substitution Procedures
      40CFR75 Appendix B, Quality Assurance and Quality Control Procedures
      40CFR75 Appendix C, Missing Data Estimating Procedures
      40CFR75 Appendix D, Optional SO2 Emissions Data Protocol
      40CFR75 Appendix F, Conversion Procedures
      40CFR75 Appendix G, Determination of CO2 Emissions
   8. District Rule numbers only, will be used for the most part in this permit.
The title of all
      rules referenced are as follows:
      SIP Rule 106, Standard Conditions
      SIP Regulation IV, Rule 111, Nuisance (abbreviated SIP Rule IV.111)
      SIP Regulation I, Rule 113, Continuous Emissions Monitoring
               (abbreviated SIP Rule I.113)
     SIP Regulation IV, Rule 113, Particulate Matter (abbreviated SIP Rule
IV.113)
     SIP Rule 114, Gaseous Contaminants Prohibitions
     SIP Rule 201.E, Posting of Permit to Operate
     Rule 204, Requirements (a.k.a. New Source Review)
     Rule 206, Conditional Approval
     Rule 210, Periodic Inspection, Testing and Renewal of Permits to Operate
     Rule 216, Federal Part 70 Permits
     Rule 217, Federal Part 72 Permits
     Rule 302, Schedule of Fees
     SIP Rule 401, Visible Emissions
     Rule 402, Nuisance
     Rule 403, Particulate Matter Emission Standards
      SIP Rule 404, Sulfur Compounds Emission Standards, Limitations and
Prohibitions
     SIP Rule 405, Nitrogen Oxides Emission Standards, Limitations and
Prohibitions
      SIP Rule 406, Carbon Monoxide Emission Standards and Limitations
      SIP Rule 407, Organic Material Emission Standards, Limitations and
Prohibitions
      Rule 407, Organic Material Emission Standards
      Rule 411, Surface Coating of Metal Parts and Products. . . . . . .
     Rule 425, Storage of Volatile Organic Compounds
     Rule 429, Oxides of Nitrogen and Carbon Monoxide from Electric Power
Generation
                Boilers
      Rule 430, Control of Oxides of Nitrogen from Industrial, Institutional,
                Boilers, Steam Generators, and Process Heaters
```

#### B. Other conventions:

1. Unless otherwise noted, a "day" shall be considered a 24 hour period from midnight to

midnight (i.e., calendar day).

2. The process unit identifications are a holdover from the original permit number

designations and are not sequential. This was done to provide continuity between the

old and new permit systems. e.g., Process A (main boilers) is followed by Process  ${\tt C}$ 

(abrasive blasting) is followed by Process D (off-site steam generators). Note that

Permit B used to be an oil water separator system and has long since been cancelled.

3. The term "boiler(s)" will be used for the electrical power producing units described in

section II.B.1 and the term "off-site boiler(s)" or "off-site steam generator(s)" will be

used for the steam heating units described in section II.B.3.

4. Where there is no pertinent information for any given cell in any given table, an entry of

"n/a" is used to indicate "not applicable".

C. Abbreviations used in this permit are as follows:

Chapter 40 to the Code of Federal Regulations 40CFR APCO Air Pollution Control Officer California Code of Regulations CCR continuous emissions monitoring system CEMS CO carbon monoxide CO2 carbon dioxide District San Luis Obispo County Air Pollution Control District greater of a/o grains per dry standard cubic foot gr/dscf California Health and Safety Code H&SC lb/hr pounds per hour lb/mmBtu pounds per million British thermal units MBPP Morro Bay Power Plant Megawatt electric MW gross Megawatt electrical MWge NH3 ammonia non-methane organic compounds NMOC NOx oxides of nitrogen NO2 nitrogen dioxide 02 oxygen particulate matter less than 10 microns PM10 ppmv parts per million by volume QΑ quality assurance RVP Reid vapor pressure scfh standard cubic feet per hour SIC Standard Industrial Classification SIP State of California Implementation Plan SOx oxides of sulfur SO2 sulfur dioxide TPH total petroleum hydrocarbons

- I. Specific Emission and Operational Limits
- A. Emission Limits. The following emission limits shall apply to the identified units. Any

operation of a boiler unit on a mixture of oil and gas shall be considered as operating on oil.

Unit Limit Compliance Notes

A
Boilers
1 and 2
1.
NOx
gas
150 ppmv
continuous
emissions
monitoring

notes (a), (b), & (c) [District-only, Rule 429.D.1]

2.

oil 450 ppmv

Boilers 3 and 4

3. NOx gas 56 ppmv

4.

oil 250 ppmv notes (a) & (b) [SIP Rule 201 &
District-only, Rule 429.D.1]

5. NOx gas 225 ppmv

corrected to three percent oxygen [SIP Rule 405.A.1]

6.

oil 300 ppmv

Boilers 1,2,3,&4 7. CO 1,000 ppmv

8.

2,000
ppmv
annual test
dry basis, intentional
duplication of condition
III.A.1.e [SIP Rule 406.A]

9.
NH3
10 ppmv
annual test if
used for

emission control notes (a) & (b) [District-only, Rule 429.D.3]

I
carbon
adsorp-tion
system
exhaust
10.
TPH
a.
0.075 lb/hr
test every
two weeks
[District-only, Rule 206]

ben-zene b. 0.020 ppmv

[District-only, Rule 206]

TPH
c.
10 ppmv as
methane
test as
indicated
when inlet TPH is 6200
ppmv [District-only, Rule
206]

- notes: (a) One clock hour average at three percent oxygen on a dry basis.
- (b) For steady state compliance testing, the emission limits shall be based on a sixty
  - (60) consecutive minute average.
- (c) The emission limits may be adjusted upward to include testing equipment error as

follows:

(1) for periodic compliance testing, five percent (5%) of the applicable limit;

(2) for continuous in-stack monitoring, ten percent (10%) of the applicable limit or

2 ppmv, whichever is greater

11. Oxides of nitrogen emissions during fuel changes shall not exceed the applicable fuel oil

limit. Should the duration of the fuel change exceed twelve (12) hours, then the limit

expressed in condition I.A.12 shall apply. The APCO must be notified in advance of the fuel

change in order to qualify for the fuel oil limit except where force majeure natural gas  $\$ 

curtailment conditions preclude advanced notification. [District-only, Rule 429.D.1.e]

12. Oxides of nitrogen emissions for boilers firing on mixture of oil and gas shall not exceed the  $\$ 

following calculated limit: [District-only, Rule 429.D.1.f]

NOX limit = (OF) (oil NOX limit) + (GF) (gas NOX limit)

Where: OF = total heat input from oil / total heat input GF = total heat input from gas / total heat input

13. The emission limitations listed in conditions I.A.1, I.A.2, I.A.3, and I.A.7 shall not apply

during: [District-only, Rule 429.C.1]

- a. periods of start-up, not to exceed twelve (12) hours; or
- b. periods of shut-down, not to exceed eight (8) hours; or
- c. APCO-approved control system calibration and tuning, not to exceed forty-eight (48)

hours, following maintenance or overhaul of a boiler or its control system. To qualify

for this exemption, the APCO shall receive notice at least forty-eight (48) hours prior to

any calibration and tuning or at the beginning of maintenance if it is of an emergency or

unforeseen nature.

B. Operational Limits. The following operational limits shall apply to the specified units.

Compliance will be determined through recordkeeping except as noted: [District-only, Rule

2061

Unit Parameter Limit Notes

A
1.
Boiler 3 & 4
heat input
3,200 mmBtuh
(each)

D
2.
off-site boilers
(2)
annual use
factor
77% (each)
hours in-use divided by
hours in a calendar year

I
3.
soil remediation
system
control
efficiency
ò95% overall
when inlet TPH is >200
ppmv and as determined
by analytical testing under
condition III.D.3

O-7&
O-8
4.
offsite fuel oil
storage tanks
TVP
ó1.2 psia

O-9
5.
offsite displace-ment oil tank
TVP
<1.5 psia

O&P
6.
fuel oil and
displacement oil
storage tanks
TVP
<0.5 psia

7. Until December 31, 2002, fuel oil shall not be burned in any main boiler unit except under  $\frac{1}{2}$ 

the following circumstances. [District-only, Rules 107 and 429.D.4]

- a. Force majeure natural gas curtailment;
- $\ensuremath{\text{b.}}$  oil burn readiness testing or required performance testing not to exceed a total of

twenty-four (24) hours annually between May 1 and October 31 and a total of ninety-six

(96) hours per year;

- c. oil burn emission testing required by the APCO; and
- d. during periods when breakdown relief has been granted under District Rule 107.

### II. Facility Description:

A. General: This facility produces electrical power for California's electrical distribution grid

and has a Standard Industrial Classification (SIC) Code of 4911. Four natural gas or oil

fired boilers produce the steam necessary for their corresponding turbine-qenerators to

produce 1,030 megawatts (gross). While oil is included in this permit as a back-up fuel, all

of the oil storage tanks are currently empty and the marine unloading terminal is in  $% \left( 1\right) =\left( 1\right) +\left( 1\right$ 

'caretaker' status and unusable. Consequently, much of the support equipment included in

this permit is not currently in use: on-site and off-site fuel oil and displacement oil storage

tanks; and off-site storage boiler and oil-water separator systems.

Main boiler units 3 and 4 have undergone modifications to reduce their oxides of nitrogen

(NOx) emissions. Each now has flue gas recirculation, overfire air ports, and low-NOx  $\,$ 

burners and are meeting a  $56~\mathrm{ppmv}$  limit established by District Rule 429. No modifications

to main boiler units 1 and 2 have yet been necessary to meet Rule 429's limitations.

Continuous emission monitoring systems (CEMS) have been installed on each of the four

main boiler units.

This facility is subject to the federal Acid Rain Program. Consequently, this permit is

intended to be a combined Acid Rain (Title IV) and federal operating (Title V) permit.

B. Specific Equipment: Equipment descriptions are organized by process. Major emission

units are listed but all associated valves, flanges, piping, and minor emission units, which are

not explicitly identified, are also included in this permit and subject to their respective major  $\ \ \,$ 

emission unit's requirements.

1. Process Unit A, Electrical Power Generation; consisting of:

TITLE
HEAT INPUT/
STEAM OUTPUT
RATING
CAPACITY
DESCRIPTION

a.
Boiler 1
1,700 mmBtuh

 $170~\mbox{MW}$  Combustion Engineering, radiant heat boiler, gas or oil fired

b. CEMS-1

> n/a n/a Perkin-Elmer MCS 100 -NOx/CO2/CO

c.
Boiler 2
1,700 mmBtuh
170 MW
Combustion Engineering, radiant heat boiler, gas or oil fired

d.
CEMS-2
n/a
n/a
Perkin-Elmer MCS 100 NOx/CO2/CO

### 1. Process Unit A, Electrical Power Generation. (continued)

TITLE
HEAT INPUT/
STEAM OUTPUT
RATING
CAPACITY
DESCRIPTION

e.
Boiler 3
3,200 mmBtuh
345 MW
Babcock and Wilcox, radiant heat
boiler, gas or oil fired, equipped with
flue gas recirculation and over-fire
air ports

2.2 million lb/hr steam

burners (24) 160 mmBtuh-gas and 165 mmBtuh-oil each Babcock and Wilcox "S" type

f. CEMS-3

> n/a n/a

Perkin-Elmer MCS 100 - NOx/CO2/CO and TECO Model 400 Transmissometer double-pass continuous opacity monitor

g. Boiler 4 3,200 mmBtuh 345 MW

Babcock and Wilcox, radiant heat boiler, gas or oil fired, equipped with flue gas recirculation and over-fire air ports 2.2 million lb/hr steam

burners (24)

160 mmBtuh-gas and 165 mmBtuh-oil each Babcock and Wilcox "S" type

> h. CEMS-4 n/a n/a

Perkin-Elmer MCS 100 - NOx/CO2/CO and TECO Model 400 Transmissometer double-pass continuous opacity monitor

i.
fuel oil additive system, with
injection pumps
n/a
n/a

1)

day tank (2)
300 gal each

n/a

additive tank 9,000 gallon common to main boiler units 3 &~4

2. Process Unit C, Portable Abrasive Blasting Equipment; consisting of:

TITLE CAPACITY DESCRIPTION

sandpot
150 lb
Clemco, model SCW-1440, or
equivalent

3. Process Unit D, Off-Site Steam Generators; consisting of:

TITLE
RATING
CAPACITY
SERIAL
DESCRIPTION

a.
PG&E #2
14.65 mmBtuh
each
350 boiler hp
each
L-60834

Cleaver Brooks, model CB-600X-350, fire tube, displacement oil fired

b.

PG&E #3

L-60835

4. Process Unit E, Oil-Water Separator System; consisting of:

TITLE CAPACITY DESCRIPTION

a.
separation tank
100 gpm
n/a

b. retention pressure tank n/a n/a

c.
skimmer tank
n/a
n/a

d.
settling tank

n/a n/a

e.
particulate filter
n/a
n/a

f.
oil sludge pond
28,000 gal
30 ft x 30 ft

g. water holding pond n/a n/a

 $\begin{array}{c} & \text{h.} \\ \text{water treatment facility} \\ & \text{n/a} \\ & \text{n/a} \end{array}$ 

5. Process Unit F, Abrasive Blasting Facility; consisting of:

TITLE
RATING
DIMENSIONS
DESCRIPTION

a.
blast booth
n/a
20ft x 50ft x 18ft
n/a

 $\begin{array}{c} & 1)\\ \text{dust collector}\\ & \text{n/a}\\ & \text{n/a} \end{array}$  Torit 4DF64 cartridge filter

2)
exhaust fan
50 hp
n/a
Buffalo model BL730, class II,
or equivalent

# 6. Process Unit I, Contaminated Soil Remediation System; consisting of:

TITLE
RATING
CAPACITY
DESCRIPTION

a.
water knockout pot
n/a
n/a
n/a

b. blower 20 hp 200-500 scfm n/a

c.
carbon adsorption canisters in
series (2)
n/a
1,200 lb each
Westates VCS-200 or
equivalent

d.
continuous monitoring system
n/a
n/a
hydrocarbon LEL on
carbon canister vent

e.
air sparge system
n/a
20 cfm
n/a

7. Process Unit O, Off-Site Storage Tanks; consisting of:

TITLE CAPACITY DESCRIPTION

a. fuel oil tank (2, PG&E

numbers 6 & 7) 500,000 bbl each

welded shell, insulated with internal steam
heater, external pontoon floating roof, single
 mechanical shoe seal, 273 ft dia

b.

displacement oil tank
 (PG&E number 2)
 43,000 bbl

insulated welded shell, external pontoon floating roof, single mechanical shoe seal, 95 ft dia

8. Process Unit P, On-Site Storage Tanks; consisting of:

TITLE
RATING
CAPACITY
DESCRIPTION

a.

displacement oil tank (PG&E number 1)

n/a
54,000 bbl

welded shell, insulated with external
steam heater, external floating roof
 with single mechanical shoe seal

b.
fuel oil tank (5)
n/a
160,000 bbl
each

welded shell, internal floating roof

c.
external steam
heater recirc pump
40 hp
n/a
n/a

d.
internal standby
steam heater (6)
n/a
n/a

 ${\tt C.}$  Insignificant Equipment. The following equipment and equipment types are considered

environmentally insignificant. This equipment is not subject to the provisions of this permit

except for those units which are subject to a federally-enforceable, generally applicable  $\,$ 

requirement as listed in condition III.A.1.

Description
Basis for Insignificance

boiler blowdown holding tank
Rule 201.A.1

chemical cleaning holding ponds Rule 201.A.1

diesel fuel dispensing facility  $Rule\ 201.A.1$ 

facility-wide metal cutting operations  $Rule\ 201.A.1$ 

diesel engine driven standby generator Rule 201.B.3

diesel engine driven firewater pumps  ${\tt Rule~201.B.3}$ 

waste oil storage tank (1,000 gallon capacity) Rule 201.A.1

fire water pump diesel storage tanks  $\operatorname{Rule}\ 201.I.3$ 

lube oil storage, clean and dirty Rule 201.I.8

gasoline fuel dispensing facility Rule 201.I.9  $\,$ 

architectural coating spray guns Rule 201.J.1

cold solvent cleaners
Rule 201.J.2

comfort air conditioning
Rule 201.M.1

comfort space heating Rule 201.M.5

welding equipment
Rule 201.N.2

#### III. CONDITIONS

#### A. STANDARD CONDITIONS

- 1. Generally Applicable Requirements. For the purposes of this permit, all requirements
- shall be based on standard conditions of  $60 \, \text{oF}$  and  $14.7 \, \text{psia}$ . [SIP Rule 106]
- a. Visible emissions shall not exceed Ringlemann #2 or forty percent (40%) opacity for a

period exceeding three (3) minutes aggregated in any sixty (60) minute period of time.

[H&SC 41701 and SIP Rule 401]

- 1) This condition shall not apply to open outdoor fires, which have been approved by
- the APCO, for the purposes of employee instruction in fire fighting methods.  $\ensuremath{[{\tt SIP}]}$

Rule 401.B.3]

- b. If the APCO determines that the operation of this equipment is causing a  $\operatorname{public}$
- nuisance, PG&E shall take immediate action to eliminate such nuisance. [District-only,

Rule 4021

c. Particulate matter emissions shall not exceed any of the following: [SIP Regulation IV,  $\,$ 

Rule 113]

- 1)  $0.3~\mathrm{gr/dscf}$ , on an hourly basis, for all emission units except combustion devices.
- 2) That lb/hr amount identified in Table I of SIP Rule IV.113 depending on process rate.
- 3) 0.3 gr/scf corrected to 3% O2 (wet) for combustion device emission units.
- 4) 0.3 gr/scf corrected to 12% CO2 for combustion device emission units. [District-only, Rule 403]
  - d. Sulfur compound limitations: [SIP Rules 114.1 and 404.E]
- 1) Sulfur compound emissions shall not exceed 0.2 percent by volume of sulfur compounds calculated as sulfur dioxide.
- 2) Gaseous fuel sulfur content shall not exceed 50 gr/100 dscf (797 ppmv) total sulfur

(as H2S at standard conditions).

3) Liquid fuel sulfur content shall not exceed 0.5 wt% sulfur.

e. Carbon monoxide emissions shall not exceed 2000 ppmv at standard conditions, except

for internal combustion engines. [SIP Rule 406]

f. Metal surface coatings shall not be thinned or reduced with photochemically reactive

solvents, as defined in District Rule 407. [SIP Rule 407.H.2]

g. Architectural coatings, which are purchased in containers of larger than one quart

capacity, shall not contain photochemically reactive solvents nor shall they be thinned

or reduced with photochemically reactive solvents. [SIP Rule 407.H.3]

h. With the exception of unavoidable losses during handling, no photochemically reactive

solvent, or any material containing that amount of photochemically reactive solvent,  $\ensuremath{\mathsf{c}}$ 

may be evaporated in any given day during the disposal of that solvent or material.

[Rule 206 and SIP Rule 407.H.4]

Act as set forth in Health and Safety Code Section 44300 (et seq.). [District-only,

H&SC 44300 (et seq.) and, District-only, Rule 204.F.1]

j. All abrasive blasting shall be conducted in accordance with Title 17 of the California

Code of Regulations (CCR). [District-only, CCR92000 (et seq.) and, District-only, Rule

206]

- 1) Each operator of this equipment shall be supplied with a copy of the abrasive  ${}^{\circ}$
- blasting provisions of Title 17 and the APCO prepared summary of Title 17.
- 2) Abrasive blasting of items smaller than eight feet must be conducted within an  $\,$

enclosure or indoors.

- 3) All dry, unconfined blasting shall utilize ARB certified abrasives.
- 4) Areas surrounding the blasting operation shall be periodically washed, swept,  $\$

vacuumed, or otherwise cleaned to prevent re-entrainment of dust.

 $k.\ \mbox{This}$  equipment shall be operated consistent with the information provided in the Titles

 $\,$  IV and V applications under which this permit, or previous versions of this permit, were

issued and shall be maintained in good working order at all times and in such a manner

as to minimize the emission of air contaminants. [District-only, Rule 206]

1. The APCO shall be notified in writing before any changes are made in the design,

construction, or operation of this equipment or any modifications are made to process

condition which might increase the emission of air contaminants. [District-only, Rule 202]

m. All subject processes shall comply with the provisions of 40 CFR 61, National Emission

Standards for Hazardous Air Pollutants, subpart A, General Provisions, and subpart M,  $\,$ 

Asbestos. [40CFR61.05.c and subpart M]

1) PG&E shall not fail to report, revise reports, or report source test results as required  $% \left( 1\right) =\left( 1\right) +\left( 1\right)$ 

by subpart M. [40CFR61.05.d]

- 2) Any change to the information provided in the initial notification under 40 CFR61.10.a shall be submitted to the APCO no later than 30 days after that  $\text{change.} \ [40 \text{CFR}61.10.c]$
- 3) Each subject process shall be maintained and operated in a manner consistent with good air pollution control practice for minimizing emissions. [40CFR61.12.c]
- n. Any gasoline transfer to a stationary storage tank shall utilize a permanently installed submerged fill pipe and a tight-fitting nozzle. [SIP Rule 407.C.1.a]
- o. PG&E shall follow good operating practices when storing or transferring gasoline

including: [SIP Rule 424.B.5]

- 1) preventing spills;
- 2) utilizing closed storage containers; and
- 3) disposing of any gasoline in compliance with all applicable federal, state, and  $\ensuremath{\mathsf{S}}$ 
  - local regulations.
- p. PG&E shall ensure that cold solvent metal cleaning devices, with the exception of wipe  $\,$

clean operations:

- 1) utilize: [SIP Rule 416.B]
  - i. A container for the solvent and the articles being cleaned;

- v. A freeboard ratio equal to or greater than 0.75, if the solvent surface area is greater than or equal to 5.4 square feet; and
  - 2) are operated as follows: [SIP Rule 416.C]
- i. All degreasing equipment and emission control equipment must be operated and maintained in good working order.
  - ii. No solvent may be allowed to leak from the degreasing equipment.

- $\,$  v. The operator shall drain parts for at least 15 seconds after cleaning or until dripping ceases.
- vi. Flowing solvent shall consist of a liquid stream and not a fine, atomized, or shower type spray; and the motive pressure for that solvent flow shall be sufficiently low to prevent the splashing of solvent beyond the container.
- q. PG&E shall not ignite or maintain an open outdoor fire except as approved by the  $$\tt APCO$$  for the purposes of employee instruction in fire fighting methods. [SIP Rule  $$\tt 501.A]$
- 2. Compliance with Permit Conditions: [Rule 216]
  - a. PG&E shall comply with all terms and conditions of this permit.
- b. The need to halt or reduce a permitted activity in order to maintain compliance shall not  $% \left( 1\right) =\left( 1\right) +\left( 1\right$

be used as a defense for noncompliance with any permit condition.

c. This permit may be reopened by the APCO at any time for cause. For the purposes of

this permit, the following circumstances shall constitute cause: [Rule 216.K.1]

1) PG&E becomes subject to an additional federally-enforceable requirement, the  $\,$ 

 $% \left( 1\right) =\left( 1\right) \left( 1\right)$  remaining term of this permit is three years or more, and the effective date of that

requirement is not later than the date on which this permit is due to be reissued.

2) The APCO or the EPA determine that this permit contains a material mistake or  $\frac{1}{2}$ 

that inaccurate statements were made in establishing the emissions standards,

terms, or conditions of the permit.

3) The APCO determines that this permit must be revised or revoked to assure  $\ensuremath{\mathsf{ass}}$ 

compliance with any applicable requirement, or  $\ensuremath{\mathtt{EPA}}$  determines that the permit

must be revised or revoked to assure compliance with any federally-enforceable

requirement.

- d. This permit does not convey property rights or exclusive privilege of any sort.
- e. Within a reasonable time period, PG&E shall furnish any information requested by the

APCO, for the purpose of determining:

- 1) compliance with this permit;
- 2) air contaminant emissions;
- 3) whether or not cause exists to modify, revoke, reissue, or terminate this permit; or
  - 4) whether or not cause exists for an enforcement action.
- f. Continuing non-compliance with any federally-enforceable permit condition is grounds

for permit termination, revocation and reissuance, modification, enforcement action, or  $% \left( 1\right) =\left( 1\right) \left( 1\right) +\left( 1\right) \left( 1\right) \left( 1\right) +\left( 1\right) \left( 1\right$ 

denial of permit renewal.

g. If PG&E is not in compliance with any federally-enforceable requirement and a

variance is obtained from the District's Hearing Board, PG&E shall submit to the APCO

a schedule of compliance, which has been approved by the Hearing Board, as an  $\,$ 

administrative amendment to this permit.

h. A pending permit action, or notification of anticipated noncompliance, does not stay any  $% \left( 1\right) =\left( 1\right) +\left( 1\right)$ 

condition of this permit.

i. All terms and conditions of this permit are enforceable by the  $\ensuremath{\mathtt{EPA}}$  Administrator and

citizens of the United States under the federal Clean Air Act unless referenced as being  $% \left( 1\right) =\left( 1\right) +\left( 1\right) +\left$ 

based on a District-only requirement. All terms and conditions of this permit, including

those referenced as being based on a District-only requirement, are enforceable by the  $\,$ 

APCO.

j. This permit, or a true copy, shall be made readily accessible at PG&E's Morro Bay

power plant and shall not be altered or defaced in any way. [SIP Rule 201.E&F]

k. The terms and conditions of this permit shall apply to the equipment listed herein,

which is operated by either PG&E or their contractor(s), and located at 1290  $\,$ 

Embarcadero, Morro Bay, California, at PG&E's offsite storage facility north of State

Highway 41, or on contiguous properties to those addresses, which are owned and  $\ensuremath{\mathsf{S}}$ 

controlled by PG&E.

1. Any change in the designated representative shall be documented by the submission of a

certification of representation to EPA headquarters with a copy to the  $\ensuremath{\mathsf{APCO}}$  .

[40CFR72.23.a]

 ${\tt m.}$  Within 30 days following any change in the owners or operators, the designated

representative shall submit a certification of representation to  $\ensuremath{\mathtt{EPA}}$  headquarters with a

copy to the APCO. [40CFR72.23.c.2]

3. Emergency Provisions: PG&E shall comply with the requirements of District Rule 107,

Upset and breakdown Conditions. [Rule 107]

- 4. Compliance Plan [Rule 216]
- a. PG&E will continue to comply with those permit conditions with which it is in compliance, as identified in this permit.
- b.  ${\tt PG\&E}$  shall comply with all federally enforceable requirements that become applicable

during the permit term, in a timely manner, as identified in this permit.

- c. PG&E shall comply with all APCO approved compliance plans. [District-only]  $\label{eq:complex}$
- 5. Right of Entry: The Regional Administrator of U.S. Environmental Protection Agency, the

Executive Officer of the California Air Resources Board, the APCO, or their authorized

representatives, upon the presentation of credentials, shall be permitted to enter upon the  $\ensuremath{\mathcal{C}}$ 

premises and, at reasonable times, be permitted to: [Rule 216.F.2.a]

a. Inspect the stationary source, including equipment, work practices, operations, and

emission-related activity;

- b. Inspect and duplicate records required by this Permit to Operate; and
- c. Sample substances or monitor emissions from the source or other parameters to assure

compliance with the permit or applicable requirements. Monitoring of emissions can

include source testing.

6. Severability: The provisions of this Permit to Operate are severable, and, if any provision

of this Permit to Operate is held invalid, the remainder of this Permit to Operate shall not be

affected thereby. [Rule 216]

7. Circumvention: PG&E shall not build, erect, install, or use, any article, machine,

equipment, or process subject to an applicable standard, if the use of which conceals an

emission that would otherwise constitute a violation of that standard. [40CFR60.12, 61.19]

8. Permit Life: This Permit to Operate shall become invalid five years from the date of

issuance unless a timely and complete renewal application is submitted to the District.

 ${\tt PG\&E}$  shall apply for renewal of this permit no later than six months before the date of

expiration. Upon submittal of a timely and complete renewal application, this permit to  $% \left( 1\right) =\left( 1\right) \left( 1\right) +\left( 1\right) +\left( 1\right) \left( 1\right) +\left( 1$ 

operate shall remain in effect until the APCO issues or denies the renewal application. [Rule

- 9. Payment of fees: PG&E shall remit Title V compliance determinations fees to the District
- in response to the District's invoice on a timely basis. Failure to remit fees in accordance
- with District Rule 302 shall result in forfeiture of this Permit to Operate. Operation without
- a permit to operate subjects the source to potential enforcement action by the District and the  $\,$ 
  - U.S. EPA pursuant to section 502(a) of the Clean Air Act. [Rule 216]

B. Specific Recordkeeping, Inspection, and Reporting Requirements. All records must be

retained for a minimum of five (5) years and be made available to the APCO upon request.

For the purposes of this permit, records shall be considered all calibration and maintenance  $\$ 

records, all original strip-chart or electronic recordings for continuous monitoring and

instrumentation, all records specifically required to be maintained herein, and copies of all

reports required to be submitted herein. [District-only, Rule 206, for "District-only" records;

 ${\tt 40CFR60.7.f}$  for off-site storage tanks; and Rule 216.F.1 for all records other than those

which are "District-only"]

- Recordkeeping: PG&E shall record:
- a. For all four main boiler units, unless otherwise noted, and on an hourly basis:
- 1) continuous emission monitoring data as required by 40CFR75.54.b; [40CFR75.54.b]
- 2) NOx emissions data as required by 40CFR75.54.d and 40CFR75.12.b; [40CFR75.54.d  $\,$

and 40CFR75.12.b]

- 3) CO2 emissions data as required by 40CFR75.54.e.2; [40CFR75.54.e.2]
- 4) SO2 emissions data, when burning oil, as required by 40CFR75.55.c.1&4; and [40CFR75.55.c.1&4]
- 5) SO2 emissions data, when burning natural gas, as required by 40 CFR 75.55.c. 3.

[40CFR75.55.c.3]

- b. The following data for each certified continuous emission monitoring system:
- 1) NOx and CO2 monitor daily test, seven-day calibration error test, and corrective action

follow-up test data as required by 40CFR75.52.a.1 and 40CFR75.56.a.1; [40CFR75.52.a.1 and 75.56.a.1]

2) NOx and CO2 monitor quarterly linearity check data as required by  $40 \mbox{CFR75.52.a.3}$  and

40CFR75.56.a.3; [40CFR75.52.a.3 and 75.56.a.3]

3) NOx and CO2 monitor relative accuracy tests and test audit data as required by  $\frac{1}{2}$ 

40CFR75.52.a.5%6 and 40CFR75.56.a.5; [40CFR75.52.a.5%6 and 75.56.a.5]

- 4) NOx and CO2 monitor cycle time test data as required by 40CFR75.56.a.6; [40CFR75.56.a.6]
- 5) The results of all trial runs, trial certification tests, quality assurance (QA) activities, and

 $\ensuremath{\, \text{QA}}$  measurements necessary to substantiate compliance with all relevant requirements

as required by 40CFR75.52.a.7 and 40CFR75.56.a.7; and [40CFR75.52.a.7 and 75.56.a.7]

6) CO monitoring data as required by 40 CFR60.7(d) Figure 1 and 40 CFR60.App F.4.4.

[40CFR60.7(d) and 60.App F.4.4]

c.  ${\tt SO2}$  emission fuel flow meter certification and quality assurance test data as required by

40CFR75.56.b.1. [40CFR75.56.b.1]

- d. For each main boiler unit: [District-only, Rule 429.E.1]
- 1) gross and net energy production in megawatt hours (MW-hrs) calculated on a daily  $\ensuremath{\text{a}}$

basis;

- 2) quantity of natural gas burned on an hourly basis, or
- 3) quantity of fuel oil burned on an hourly basis,
- 4) type of fuel oil burned and its sulfur content for each period of operation on fuel oil, and
- 5) the injection rate of reactant chemicals used for NOX emission reduction, if any, on an

hourly basis;

6) the CO emission rate in lb/hr and ppmv, corrected to three percent (3%) O2 on dry basis,

based on data from the CEMS on an hourly basis;

7) the NOX emission rate in lb/hr and ppmv, corrected to three percent (3%) 02 on dry

basis, based on data from the CEMS on an hourly basis; [Rule 206 for Units  $3\&4~\mathrm{NOx}$ 

concentrations

- 8) the quarterly and annual NOx emission rate in lb/mmBtu; [40CFR75.12.b]
- 9) the quarterly and cumulative SO2 mass emission rate and heat input for each calendar

quarter and each calendar year by summing hourly values; [40CFR75.App D.3.4]

- 10) the dates, times and duration of any start-up and shut-down periods; and
- 11) the facility-wide NOx emissions in tons per day calculated on a daily basis at such time

as PG&E opts to comply with condition III.F.1.a.2 of this permit and no later than  $% \left( 1\right) =\left( 1\right) +\left( 1\right)$ 

December 31, 2002.

e. The manufacturer's brand name and designation of each solvent used to thin or reduce any

coating which is applied to a metal surface by either PG&E or any contractor employed by

 ${\tt PG\&E.}$  Purchase records will be sufficient to satisfy this recordkeeping requirement.

Material Data Safety Sheet information sufficient to determine the non-photochemical

reactivity of those solvents shall be maintained within easy access of this record. [SIP Rule 407.H.2]

f. The manufacturer's brand name and designation of each architectural coating used in

containers of one quart capacity or larger, and the solvent used to thin or reduce those

coatings, which is applied by either PG&E or any contractor employed by PG&E. Purchase

records will be sufficient to satisfy this recordkeeping requirement. Material Data Safety

Sheet information sufficient to determine the non-photochemical reactivity of those coatings

and solvents shall be maintained within easy access of this record. [SIP Rule 407.H.3]

2. Files to be Maintained. PG&E shall maintain the following files, retain them for a

minimum of five (5) years, and make them available to the APCO upon request. [40CFR75.54.a]

a. Supporting data and information used to calculate values required to be recorded under  $% \left( 1\right) =\left( 1\right) +\left( 1\right) +$ 

condition III.B.1.a. [40CFR75.54.a.2]

- b. Certification test data and information recorded under condition III.B.1.b. [40CFR75.54.a.4]
- c. The monitoring plan required under condition III.C.1.b. [40CFR75.54.a.5]
- d. The quality control plan required under condition III.C.1.b. [40CFR75.54.a.6]
- e. An operating log shall be maintained at the abrasive blasting booth, process unit F, and

made available upon request. At a minimum, the log shall include hours of operation, type

of abrasives used, and a copy of Title 17. [District-only, Rule 206]

f. Soil remediation system biweekly emission screening results obtained under condition

III.D.2. [District-only, Rule 206]

3. Inspections, calibrations, and sampling: PG&E shall inspect, calibrate, or sample, the

following processes as indicated. The results shall be recorded in an operational  $\log$  or as

specified. [Rule 206 and, for "District-only" inspections, District-only, Rule 206]

a. Performance criteria for the periodic checks required by these conditions are as follows.

Any percent value refers to percent (%) of instrument scale unless otherwise noted:

[40CFR75.App A.3 for NOx & CO2 and 40CFR60.App F for CO]

Test
Frequency
Parameter
Warning Level
Out-of-Control Level

Calibration
Error Check
daily
NO channel
2.5-5.0%
greater of (g/o) 5 ppm
or >5.0%

CO2 channel
0.5% of measured
CO2
1.0% of measured CO2

CO 5.0-10.0% >10.0% for 1 day or >5.0% for 5 days

> Three Point Linearity Check quarterly NOx/CO2

g/o 5 ppm or >5.0% at
each of 3 test levels

Two point Linearity Check 3 out of 4 quarters

g/o  $\tilde{n}5$  ppm or >15% of the average audit value

Relative
Accuracy Test
Audit
annually
(a)
NOx

>10% or ñ0.02 lb/mmBtu

СО

g/o >ñ10% or >ñ5 ppmv

Notes (a) increase RATA frequency to semiannual if results exceed 7.5%.

b. On a daily basis:

Process
Description
Parameter

conduct a calibration error test. [40CFR75.App B.2.1]

2)
CO CEMS
conduct a calibration error test. [District-only
40CFR60.App F.4.1]

main boilers
 3 & 4
 3)
 opacity
 CEMS

conduct a calibration drift assessment check and faulty lamp indicator check. [District-only, Rule 206]

## c. On a quarterly basis:

Process Description Parameter

main boilers 1,2,3,& 4 1) NOx/CO2 CEMS

> 2) CO CEMS

conduct a two point linearity check in three out of
 every four calendar quarters. [40CFR60.App F.5.1]

main boilers
 3 & 4
 3)
 opacity
 CEMS

d. On an annual basis:

Process Description Parameter

ii. Written or telephone notification of RATA

testing shall be submitted to the APCO, with a copy to the EPA Region IX Administrator, at least 7 days prior to the first scheduled day of testing. [40CFR75.61.a.1.ii]

2)
CO CEMS
conduct a RATA. [District-only, 40CFR60.App
F.5.1.1]

main boilers
 3 & 4
 3)

opacity CEMS

conduct calibration error, optical alignment, and zero alignment checks. See note (a). [District-only, Rule 206]

Notes (a) These checks shall also be performed if any optical surface is moved, or following

 $% \left( 1\right) =\left( 1\right) +\left( 1\right) +\left($ 

 $\,$  manual including the replacement of: a lamp, a detector assembly, an optical  $\,$ 

chopper, a mirror pick-up, or a soldered connection.

- 4. Unusual operating conditions: actions and reporting [District-only, Rule 206]
  - a. Main boiler fuel oil firing
- 1) The District shall be notified prior to fuel oil firing and after returning to natural gas

fuel.

2) At any time, failure of the natural gas supply system may be considered as a breakdown

in accordance with District Rule 107.

- 3) Soot-blowing shall be conducted on a continuously cycling basis during oil firing.
- 4) The fuel oil additive system shall be utilized at all times during oil firing on main boiler

units 3 and 4.

5) The mix ratio of additive to fuel oil shall not drop below that which supplies the

equivalent of 4 lb MgO/8,000 gallon fuel oil, one gallon IPC-R-900/8,000 gallon,

except during start-up of the system, which is not to exceed 30 minutes for any period

of fuel oil burning. Analytical results will be supplied to the District if further

optimization of the additive system is conducted.

6) The fuel oil additive shall be metered into the fuel oil line with a  $\operatorname{District}$  approved

system for verification of the use rate.

7) A District accessible flow meter shall be maintained on the fuel oil supply lines to

indicate fuel oil delivered to the burners. [40CFR75.App D.2.1.2]

8) Any fuel flow meter, used to determine SO2 emissions under appendix D to  $40 \, \text{CFR} 75$ ,

shall be recalibrated prior to use, if its certification has expired. [40CFR75.App

D.2.1.6.1]

9) A representative fuel oil sample shall be drawn and analyzed for sulfur and heat content

each day that any unit is burning oil. Split samples shall be obtained with one sample

undergoing analysis and the other sample, appropriately labeled with a chain-of-custody  $% \left( 1\right) =\left( 1\right) +\left( 1\right) +\left($ 

information and being of at least 200 cubic centimeters in volume, retained for not less  $% \left( 1\right) =\left( 1\right) +\left( 1\right) +\left$ 

than 90 days after the end of the current calendar year allowance period. [SIP Rule

114.1 for sulfur analysis and 40CFR75.App D.2.2.2, 2.2.5, and 2.2.7 for all

## requirements]

## b. CEMS Recertification

1) Any NOx/CO2/CO monitor, which undergoes replacement, modification, or change that

significantly affects its ability to meet the requirements of this permit, must be

recertified. [40CFR75.20.b]

2) Written or telephone notification of recertification testing shall be submitted to the  $\mbox{EPA}$ 

Region IX Administrator, with a copy to the APCO, at least 7 days prior to the first

scheduled day of testing. [40CFR75.61.a.1.ii]

c. Reports of Violations. Any violation of any emission limit in condition I.A, as indicated by

the records of the monitoring device, shall be reported by the operator of the source to the

APCO within 48 hours after such occurrence. [Rule 113.H.3 and SIP Rule I.113.IV.C]

d. Monitoring Equipment Breakdown or Shutdown. As soon as reasonably possible, but in any

case within four (4) hours, after its detection, notify the APCO of any preakdown or

shutdown of any CEMS equipment. [District-only, Rules 206 and 113.H.4]

e. Any deviation from any requirement in this permit, excluding those reported under District

Rule 107, Breakdown and Upset Conditions, shall be reported to the APCO as follows:

[Rule 216.F.1.n]

- 1) As soon as reasonably possible, but in any case within four (4) hours, after its detection.
- 2) As soon as the occurrence has been corrected, but no later than  $10\,$  calendar days after

the event, through a written report which includes the probable cause of the deviation  ${\ }$ 

and the corrective actions or preventative measures taken.

f. At least 10 working days before asbestos stripping or removal work, the APCO shall be  $\,$ 

notified as required by section 61.145.b.3.i of 40CFR61 subpart M, National Emission

Standard for Asbestos. [40CFR61.145.b.3.i]

5. Reporting. Each report due on the date indicated in the following table should include data

for the respective time periods in any given year, unless otherwise indicated. [Rule 206]

Due Date Quarterly Data Semi-annual Data Annual Data

January 31
October 1 through
December 31
July 1 through
December 31

March 1

January 1 through December 31

April 30 January 1 through March 31

July 31
April 1 through June 30
January 1 through
June 30

October 31 July 1 through September 30

a. Within 45 days of conducting soil remediation system analytical testing under condition

III.D.3, PG&E shall submit a report to the APCO. That report shall include: [District-only,

Rule 206]

1) upstream canister influent and downstream canister effluent, NMOC and  $\tt methane$ 

concentrations in ppmv and mass flow rates in lb/hr; and

- 2) control efficiency in percent NMOC reduction.
- b. On a quarterly basis, no later than January 31, April 30, July 31, and October 31 of any

given year,

- 1) PG&E shall submit a report to the APCO, which includes the following data: [District-only, Rule 206]
- i. Results of soil remediation system screening level testing recorded under condition  $% \left( 1\right) =\left( 1\right) +\left( 1\right) +\left($

III.D.2, if the system was in operation during the respective quarter.

ii. CEMS system performance based on: [District-only, Rule 113]

(total CEMS downtime in hours) x 100 (total source operating time in hours)

where the total of CEMS downtime is to be listed as:

- (a) monitor equipment malfunctions,
- (b) non-monitor equipment malfunctions,
  - (c) quality assurance calibration,
    - (d) other known causes, and
      - (e) unknown causes.
- iii. Either, [District-only, Rule 113]
- (a) an affirmative statement of, "No excess emissions", or
  - (b) an excess emission data summary based on:

(total duration of excess emissions in hours)  $\times$  100 (total source operating time in hours)

 $$\operatorname{\mathtt{where}}$$  excess emissions shall be quantified per the applicable rule or regulation

placing the limit exceeded; and

iv. for each exceedance, the date and time, concentration, current emission limit, cause  $% \left( 1\right) =\left( 1\right) \left( 1\right)$ 

(if known), and corrective or protective actions taken.

- v. A results summary of any CEMS relative accuracy test audit performed during the  ${\tt respective\ quarter.}$
- 2) PG&E shall submit the Electronic Data Report information identified in 40 CFR 75.64 to

the EPA administrator. Each report shall be certified to be true, accurate, and correct by  $\$ 

a responsible official. [40CFR75.64.a]

c. On a semi-annual basis, PG&E shall submit a report to the APCO, with a copy to the EPA  $\,$ 

Region IX Administrator. Each report shall be submitted no later than January 31 and July

31 of any given year, shall be certified to be true, accurate, and complete by a responsible

official, and shall include the following data: [Rule 216.F.1.c.3]

1) Include a summary of deviations from any federally-enforceable requirement in this

permit.

 If PG&E is not in compliance with any federally-enforceable requirement, include a

 $\,$  progress report on the schedule of compliance which has been approved by the <code>District</code>

Hearing Board. That report shall include: [Rule 216.F.2.c]

i. Dates for achieving the activities, milestones, or compliance required in the

schedule of compliance, and dates when such activities, milestones or compliance  $% \left( 1\right) =\left( 1\right) \left( 1\right) +\left( 1\right) \left( 1\right) \left( 1\right) +\left( 1\right) \left( 1\right$ 

were achieved; and

ii. An explanation of why any dates in the schedule of compliance were not or will not

be met, and any preventive or corrective measures adopted.

- d. On an annual basis, no later than March 1 of any given year,
- 1) PG&E shall submit a Compliance Certification Report to the APCO pursuant to District

Rule 216.L.3. This report shall identify each federal applicable requirement in this

permit, the compliance status of each subject process unit, whether the compliance was

continuous or intermittent since the last certification, and the  $\mathsf{method}(s)$  used to

determine compliance. Each report shall be certified to be true, accurate, and complete

by a responsible official and a copy of this portion of the annual report shall also be

submitted to the EPA Region IX Administrator. [40CFR72.90.a and Rule 216.L.3]

- 2) PG&E shall make the following information available to the APCO upon his request:
- i. Summaries of automatic and manual calibration data and internal audits of the opacity monitors on main boiler units 3 and 4. [District-only, Rule 206]
- ii. Summaries of automatic and manual calibration data and internal audits of the CO monitors on main boiler units 1, 2, 3, and 4. [District-only,

40CFR60.App F.7]

- e. On an annual basis, at least 10 working days before the end of the calendar year, the APCO
- shall be notified of the predicted asbestos renovations for the following year as required by

section 61.145.b.3.ii of 40CFR61 subpart M. [40CFR61.145.b.3.ii]

- C. Emissions Monitoring Program.
- 1. Continuous Emissions Monitoring. PG&E shall:
- a. Operate and maintain continuous emission monitoring systems (CEMS) to determine:
- 1) NOx emissions from each main boiler; [40CFR75.10.a.1 and, District-only, Rule 429.D.5.b for all units; SIP Rule I.113.II.A.1 and Rule 113.B.1.a for units 3&4]
- 2) CO2 emissions from each main boiler; [40CFR75.10.a.3.i for all units; SIP Rule

  I.113.II.A.2 and Rule 113.B.1.b for units 3&4]
  - 3) CO emission from each main boiler; and [District-only, Rule 429.D.5.a]
  - 4) Opacity emissions from main boiler units 3 and 4. [SIP Rule 401]
- b. Ensure that the CEMS are operated, calibrated, and maintained according to:
- 1) the quality assurance (QA) and quality control procedures of 40CFR75

  Appendix

  B, the QA plan prepared pursuant to section 1 of that appendix, and

  40CFR60

  Appendix F; [40CFR75.10.b and 75.21.a for NOx and CO2; and, Districtonly,

  40CFR60.App F for CO]
  - 2) the APCO approved compliance plan; and [District-only, Rule 206]
  - 3) the monitoring plan prepared pursuant to 40CFR75.53.a. [40CFR75.53.a]
  - c. Determine SO2 mass emissions using the procedures of 40CFR75 Appendix D. [40CFR75.11.d.2]
  - d. Calculate NOx emissions using the procedures of 40CFR75 Appendix F. [40CFR75.12.b]
  - e. Determine CO2 mass emissions using the procedures of 40CFR75 Appendix G. [40CFR75.10.a.3.ii and 75.13.b]
- f. Ensure that all quality assurance calibration gases meet the requirements of 40 CFR 72.2.

[40CFR75.21.c]

g. During any period during which a monitor is out-of-control, follow the procedures of

40 CFR 75.24 for NOx and CO2 instruments and the procedures of 40 CFR 60 Appendix

F.4.3 for CO instruments. [40CFR75.24 for NOx and CO2, and, District-only,

40CFR60.App F.4.3 for CO]

h. During any period during which monitoring or heat input data is missing, follow the  $\,$ 

procedures of 40CFR75 Subpart D for NOx and CO2 instruments. [40CFR75 Subpart  $\,$ 

D]

2. Changes to Monitoring Plans. Whenever a replacement, modification, or change to a

certified CEMS causes that system to be recertified, PG&E shall update the respective unit's

monitoring plan. [40CFR75.53.b]

3. Fuel Flow Instruments. Natural gas and fuel oil flow instrumentation shall be maintained

and operated in accordance with 40 CFR75 Appendix D for the purposes of calculating SO2

emissions. [40CFR75.App D.2.1 and 40CFR75.4.g]

 $\ensuremath{\mathsf{D}}.$  Compliance Testing Conditions. All testing shall be conducted in accordance with the

District's Source Test Policy with the results being reported to the APCO within  $45~\mathrm{days}$  of

testing. [District-only, Rule 210.B.1]

1. Annual Compliance Testing and Equipment Calibration

Condition

a.

PG&E shall conduct or cause to be conducted, compliance emission testing for NOx and CO from all four main boiler units. [SIP Rule 406.A for CO]

b.

Each main boiler unit shall be tested at least once during any given calendar year. [SIP Rule 406.A for CO]

c.

The calibration of natural gas and fuel flow instrumentation used to determine SO2 emissions shall be checked and recalibrated, if necessary. [40CFR75.App D.2.1.6.1]

2. Soil Remediation System Screening: Whenever the contaminated soil remediation system  $\$ 

is in operation, the carbon canisters shall be sampled for total petroleum hydrocarbons

(TPH), as methane, every two weeks with a Photo Vac HL Micro-Tip photo-ionization

detector (PID), or equivalent detector subject to the APCO's approval. The three points to be  $\frac{1}{2} \left( \frac{1}{2} \right) \left( \frac{1}{2$ 

sampled are: the upstream canister influent, the intermediate point between the two

canisters, and the downstream canister effluent. [District-only, Rule 206]

3. Soil Remediation System Analytical Testing: If the downstream canister effluent  $\mathtt{TPH}$ 

concentration, measured under condition III.D.2 above, exceeds 30 ppmv, as methane, the  $\,$ 

following shall be performed: [District-only, Rule 206]

ACTION LOCATION PARAMETER

a.
carbon canister
analytical testing,

notes (a) through (c)
upstream canister influent and
downstream canister effluent
NMOC and methane
concentrations in ppmv and
mass flow rate in lb/hr

h.

final stack exhaust gas velocity in feet per minute

c.
calculations, note (d)

system control efficiency

- Notes: (a) Triplicate samples shall be taken at each point and their results averaged.
- (b) The vapor extraction configuration shall be that most likely to produce a representative sample of inlet petroleum vapors.
- (c) All sampling lines shall be purged with sample gas prior to obtaining any sample.
- (d) Control efficiency shall be calculated as [(1-effluent NMOC concentration / influent NMOC concentration)  $\times$  100 percent].
- 4. Test Methods: The following methods shall be used for compliance testing and performance audits. The author's most currently approved version of any given method shall

be used.

Parameter/Requirement Method

sample and velocity traverses EPA 1 or ARB 1

velocity and volumetric flowrate EPA 2 or ARB 2

O2, CO2, excess air, and molecular weight EPA 3, ARB 3, or ARB 100

moisture content EPA 4 or ARB 4

NOx stack emissions EPA 7E or ARB 100

NOx CEMS relative accuracy 40 CFR 75, App A

CO stack emissions EPA 10 or ARB 100

CO CEMS relative accuracy 40CFR60, App F

soil remediation system screening [District-only]  $$\tt EPA\ 21$$ 

soil remediation system analytical testing [District-only]  $$\tt EPA$$  25

fuel oil sulfur content
 ASTM D1552-83

- E. Conditions specific to the identified process:
- 1. Process Unit A, Electrical Power Generation. none
- 2. Process Unit C, Portable Abrasive Blasting Equipment. none
  - 3. Process Unit D, Off-Site Steam Generators
- a. This equipment shall not be used unless it complies with District Rule 430, Control of

NOx from Commercial Steam Generators. An authority to construct shall be obtained

in accordance with District Rule 202, Permits, prior to the replacement of any burner.

[District-only, Rules 202, 206, and 430]

b. The APCO shall be notified prior to the firing of either steam generator on fuel oil.

[District-only, Rule 206]

- 4. Process Unit E, Oil-Water Separator System. [District-only, Rule 206]
- a. The APCO shall be notified within twenty-four (24) hours of oil-water separator use.

At a minimum, that notification shall include the type of petroleum entering the unit, the  $\$ 

throughput amount, and the cause for use.

- 5. Process Unit F, Abrasive Blasting Facility. [Rule 206]
- a. All abrasive material transfer points shall be fully enclosed during blasting. Loading of

 $\,$  new and spent abrasive shall be conducted with a minimum of dust generation.

- b. All dust collector filters shall be maintained in good condition.
- c. Only steel grit and ARB certified abrasives may be recycled. The recycling of abrasives

 $\,$  must be done in accordance with the Performance Specifications set forth in Title 17.

[District-only, Rule 206]

d. Visible emissions from the blasting booth shall not exceed twenty percent (20%)

opacity for periods aggregating more than three (3) minutes in any hour.

- 6. Process Unit I, Contaminated Soil Remediation System. [District-only, Rule 206]
- a. Contaminated soil vapors shall only be vented to the remediation system. All piping,

valves, and fittings shall be maintained in a gas-tight condition such that no organic

vapors or gas leaks are detectable.

 $\ensuremath{\text{b.}}$  The system shall be immediately shut down if the downstream carbon canister effluent

 $\,$  TPH concentration exceeds 45 ppmv, as methane, during screening level testing under

condition III.D.2.

- 7. Process Unit O, Off-Site Storage Tanks.
- a. There shall be no holes, tears, or openings present which allow the emission of organic

vapors through the envelop surrounding the annular vapor space enclosed by the roof

edge, stored liquid surface, shoe, and seal fabric, except when the storage tanks are

empty and out of service. [District-only, Rule 206]

 $\ensuremath{\text{b.}}$  The storage tank floating roof seals must be maintained in good condition and shall

close the gap, between the roof and the tank wall, to 1/8 inch or less, except when the

storage tanks are empty and out of service. [District-only, Rule 206]

c. If the true vapor pressure of any material stored in any tank exceeds  $1.0\,$  psia or the Reid

vapor pressure of the material is  $1.0~\mathrm{psia}$  or more, a record shall be maintained of:

[40CFR60.113.a]

- 1) the material stored;
- 2) the dates that storage begins and ends for that material; and
- 3) the maximum true vapor pressure for that material during the storage period.
- d. Action must be taken to comply with the notification, recordkeeping, and reporting

requirements as specified in 40 CFR 60.7. All notifications and reports shall be

submitted to the APCO with a copy submitted to the EPA Region IX Administrator.

Such action shall include: [40CFR60.7]

1) Written notification, of the anticipated date of any physical or operational change

which may increase emissions, no less than 60 days prior to that date.

2) Maintaining records of the occurrence and duration of any startup, shutdown, or

malfunction

- 8. Process Unit P, On-Site Fuel Oil Storage Tanks. [District-only, Rule 206]
- a. All internal roof column supports, sampling points, depth gauging holes, and ladder

penetrations shall be lined with polyurethane and slotted in such a fashion as to

minimize the exposure of stored material to the intra-roof space.

- b. The APCO shall be notified when crude oil is first stored in any tank.
- c. Internal and external floating roof seals must be maintained in good condition and shall

close the gap between the roof and the tank wall, except when the storage tanks are  $% \left( 1\right) =\left( 1\right) \left( 1\right) +\left( 1\right) \left( 1\right) \left( 1\right) +\left( 1\right) \left( 1\right) \left($ 

empty and out of service.

- 9. Common to Process Units O and P: [District-only, Rule 206]
- a. The APCO shall be notified no later than 3 working days prior to the use of any tank.
- b. All valves, flanges, and pump seals shall be properly maintained and kept in good
- operating order, except when the storage tanks are empty and out of service.
- c. All gauging and sampling ports shall remain closed except when gauging or sampling is  $\mathsf{taking}\ \mathsf{place}.$
- d. The APCO shall be notified prior to the degassing of any tank so that an inspection of  $% \left( 1\right) =\left( 1\right) +\left( 1\right) +$ 
  - the floating roof seal may be conducted.
- e. This equipment shall not be used unless it complies with District Rule 425, Storage of
- $\label{thm:construct} \mbox{Volatile Organic Compounds.} \mbox{ An authority to construct shall be obtained} \\ \mbox{in accordance} \\$ 
  - with District Rule 202, Permits, prior to the replacement of any seal.

 ${\tt F.}$  Future Effective Conditions. The following conditions will become effective upon the

date as indicated.

- 1. District Rule 429
- a. Effective December 31, 2000, this facility shall comply with one of the following two

options: [District-only, Rule 429.D.1.c]

1) Oxides of nitrogen from boiler units 3 and 4 shall not exceed the following limits

based on a one (1) clock hour average at three percent (3%) oxygen on a dry basis:

- i. Operation on natural gas: 10 ppmv
- ii. Operation on fuel oil: 25 ppmv, or
- 2) The total oxides emissions from all main boilers at the Morro Bay Power Plant shall not exceed 3.50 tons per day.
- b. Effective December 31, 2002, the total oxides of nitrogen emissions from all main

boilers shall not exceed 2.50 tons per day. [District-only, Rule 429.D.1.d]

- 2. Acid Rain Program.
- a. Effective January 1, 2000, the owners and operators of Units 1, 2, 3 and 4 shall hold

 ${\tt SO2}$  allowances in the unit's subaccount not less than the total annual emissions of

sulfur dioxide for the previous calendar year. [40CFR72.9(c)]

b. Effective January 1, 2000, the sulfur dioxide emission allowances in tons per year, as

granted in Table 2 of  $40\mathrm{CFR73}$  as of July 1, 1995, are as follows. The values included

here may change as transactions occur because sulfur dioxide emission allowances may  $\ensuremath{\mathsf{may}}$ 

be bought or sold under the Acid Rain Program. [40CFR73.10.b]

year 2000 through 2009 year 2010 and thereafter

Unit 1

1,609 tpy 1,405 tpy

	139 tpy 98 tpy
Unit 3	3,793 tpy 3,483 tpy
Unit 4	3,289 tpy 2,873 tpy

G. Permit Shield. The following federally-enforceable limits are subsumed by the conditions

of this permit as referenced. Through this action, streamlined requirements which were

previously District-only requirements become federally-enforceable if any subsumed

requirement is federally-enforceable. All monitoring, recordkeeping, and reporting

requirements that are associated with any subsumed requirement are also subsumed and  $% \left( 1\right) =\left( 1\right) +\left( 1\right$ 

shall not apply except as identified elsewhere in this permit.

1. The NOx and CO2 continuous emissions monitoring requirements of SIP Rule I.113.II.A  $\,$ 

and District Rule 113.B.1 for the main boiler units are subsumed and shall not apply.

[condition III.C.1]

 $\ensuremath{\mathsf{IV}}.$  Compliance Determination Fees. The following fee schedules shall apply to the indicated

process units:

PROCESS
FEE SCHEDULE (Rule 302.E)
Each

Boiler Units 1, 2, 3, and 4 3.c boilers, >10 mmBtuh

C
Portable Abrasive Blasting
48
sandblasting
1

D
Off-Site Steam Generators
3.c
boilers, >10 mmBtuh
2

E
Off-Site Oil-Water Separator
37
oily water treatment
1

F
Abrasive Blasting Facility
48
sandblasting
1

I Contaminated Soil Remediation 49 soil decontamination 1

O Off-Site Storage Tanks
19
floating roof storage tank

P
On-Site Fuel Oil Storage Tanks
18
internal floating roof tanks
5

19 floating roof storage tank

V. Acid Rain Provisions. The PG&E Morro Bay Power Plant (MBPP) shall comply with all

applicable provisions of 40CFR72, Permits Regulation and their Title IV permit application  $\,$ 

as indicated in the following three pages: [40CFR72 and Rule 217]